

# EPA REGION 9/SOUTH COAST AQMD MEETING

RECLAIM TRANSITION & NEW SOURCE REVIEW

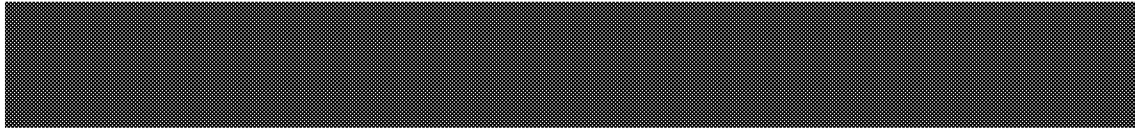
MARCH 5, 2020  
EPA REGION 9  
SAN FRANCISCO, CA

## Agenda

- Introductions
- Opening Remarks – U.S. EPA and South Coast AQMD
- Update of Regulatory Timeline
- Air quality modeling for NSR applicability
- RECLAIM BARCT Overlay
- Summary of Availability of Offsets
- BARCT Discount
- Use of Internal Bank offsets for sources > 4 tons per year

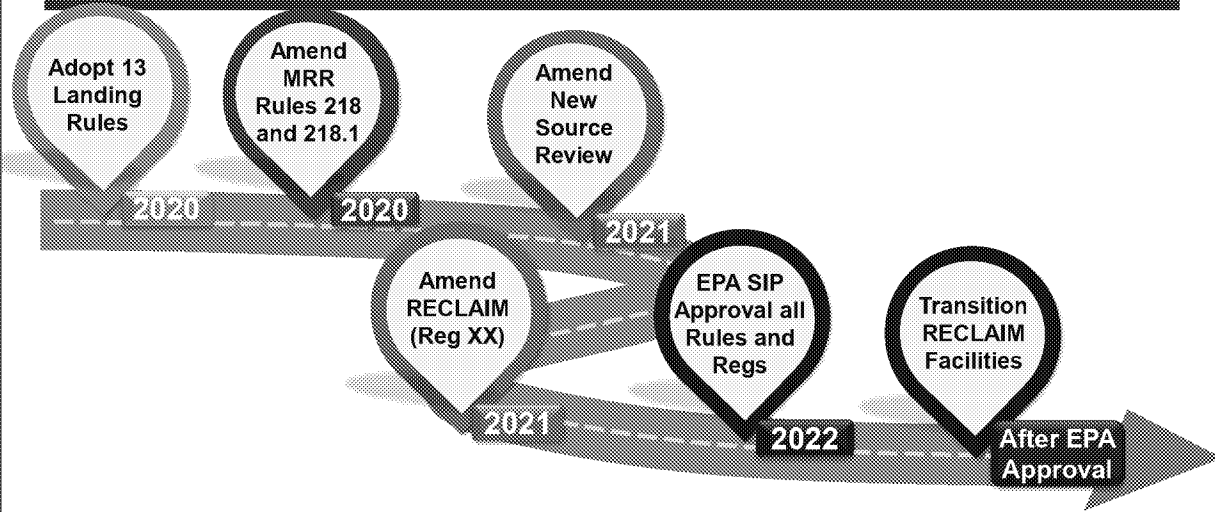


## UPDATE OF REGULATORY TIMELINE



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## Current Approach to Transitioning RECLAIM to Command-and-Control

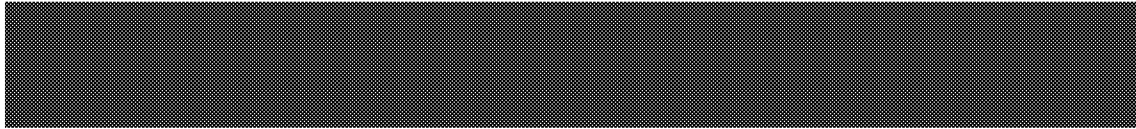


## Regulation XIII

- Anticipate public hearing in first quarter of 2021
- Goal is to have one overall amendment to Regulation XIII to address:
  - Extreme non-attainment requirements for Coachella Valley; and
  - RECLAIM transition
- Public hearing for Regulation XIII for the RECLAIM transition may be delayed - depending on resolution of issues

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## AIR QUALITY MODELING FOR NSR APPLICABILITY



## Air Quality Modeling

- At August face-to-face meeting, South Coast AQMD discussed use of air quality modeling to evaluate NSR applicability for co-pollutants emitted from the installations and modifications that are needed to comply with a South Coast AQMD rule
- Staff presented an approach that would:
  - Account for co-benefits based on regional or local modeling (e.g., 0.4 pounds of PM reduced for every pound of NOx reduced)
  - Focus is on installation of SCR and applicability of NSR for PM10/PM2.5
- U.S. EPA responded the Federal CAA requires that NSR applicability is determined using emissions

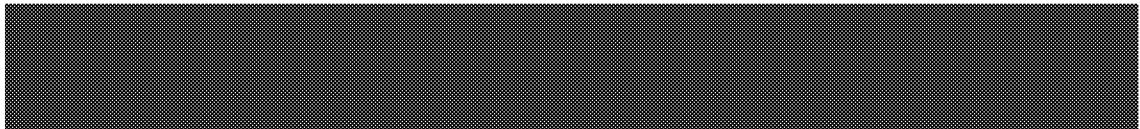
## Air Quality Modeling (*Continued*)

- Staff presented this information to its Regulation XIII Working Group
- Industry stakeholders requested that the question be re-phrased to assess if modeling can be used to determine if a source triggers NSR applicability
- Question 1: Can local or regional air quality modeling be used to show a no net increase in emissions for NSR applicability?
- Question 2: Can modeled co-benefit in PM reductions that occurs from NOx reductions be used to demonstrate that there is no net increase, such that the source would not be subject to BACT for PM emissions?





RECLAIM WITH BARCT OVERLAY



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## RECLAIM with BARCT Overlay

- Staff has discussed the concept of RECLAIM with a BARCT overlay to keep facilities in RECLAIM to:
  - Maximize use of Rule 2005 – RECLAIM NSR
  - Minimize the demand for offsets under Regulation XIII – NSR
- If RECLAIM is retained with a BARCT overlay, can a programmatic demonstration be allowed after BARCT rules are adopted
  - BARCT rules establish the enforceable limits for individual pieces of equipment at all RECLAIM facilities
- Staff has discussed general concepts for additional modifications to RECLAIM and is seeking input from U.S. EPA

## Concepts for Modifications to RECLAIM

- **Concept 1: Opt-out for Facilities at BACT**
  - ※ Allow facilities with all equipment at BACT to opt-out
  - ※ Upon exiting, RTCs would be removed
  - ※ Amount of RTCs would be representative of their actual emissions
- **Concept 2: Opt-out for Facilities no NOx Emitting Equipment**
  - ※ Allow facilities with no NOx emitting equipment to opt-out
  - ※ Upon exiting, RTCs would be removed
  - ※ Amount of RTCs would be representative of their actual emissions
- **Concept 3: Exit Federal Non-Major Source Facilities**
  - ※ Remove all facilities with a PTE less than 10 tons per year
  - ※ Upon exiting, RTCs would be removed
  - ※ Amount of RTCs would be representative of their actual emissions
- **Other concepts?????**

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## Offsets

- Two sources of offsets under Regulation XIII:
  - Open market
  - Internal Bank

Pollutant	Open Market	Internal Bank
	ERC Balance (tons per day)	Internal Offset Balance (tons per day)
VOC	5.1	107
NOx	0.4	23
PM10	0.7	16
SOx	0.4	4

[REDACTED]

OPEN MARKET

[REDACTED]

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## Open Market – ERC Generation

- Limited opportunities for ERC generation
  - Challenging to generate ERCs through over-control with BACT discounting
  - Most ERCs are generated from shutdowns (BACT discounted)
- Undesirable to incentivize facilities to shutdown equipment to generate ERCs

Generation	Over-control or shutdowns
Discount	Discounted to BACT at time of issuance
Issuance	Issued to individual owners for future use or sale; Value of ERC issued is in perpetuity

## Approach for Evaluating ERCs in the Open Market

- Compared the net ERC year-to-year balance for the past 12 years (2008 – 2019)
- Average annual NOx RECLAIM demand is 0.65 tons per day
  - Estimated demand based on NSR actions from RECLAIM facilities that would have required offsets under Regulation XIII over a 5-year period from 2011–2015 (most recent analysis)
  - Includes a 1.2-to-1 offset ratio that would be required under Regulation XIII

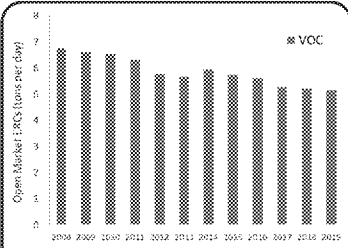
Current active ERCs available: <http://www.aqmd.gov/home/permits/emission-reduction-credits>

Historical lists of active ERCs available: <http://www.aqmd.gov/home/permits/emission-reduction-credits/historical-active-erc-and-sterc-lists>

Archive of annual ERC transaction reports: <http://www.aqmd.gov/home/research/documents-reports/erc-transaction-report-archive>

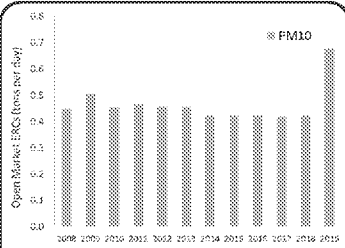


## Summary of Findings and Staff Recommendations for VOC, PM10, and SOx in the Open Market



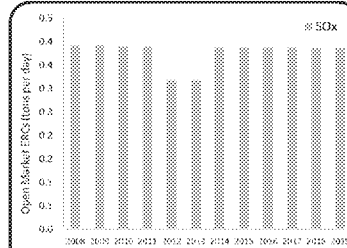
Based on supply and ERC cost (average \$21,000 per ton<sup>1</sup>), exploring other offset options is not needed

VOC



Based on the high price (average \$536,000 per ton<sup>1</sup>), other options for PM10 offsets should be explored

PM10



Based on the high price (average \$365,000 per ton<sup>1</sup>), will continue to analyze potential demand from SOx RECLAIM to understand impacts

SOx

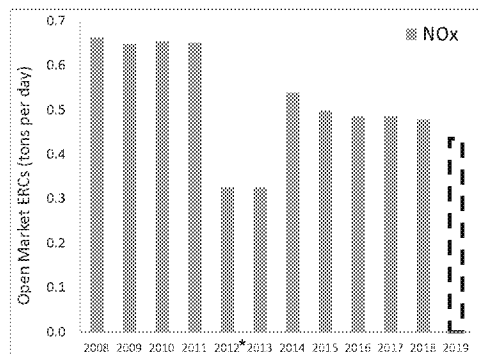
<sup>1</sup> Based on average cost of ERCs between 2013 to 2017 (most recent 5 years of data). Note Avg cost 2011 to 2015 (same time for RECLAIM demand analysis) VOC: \$25,000/ton, PM10: \$587,000/ton, and SOx: \$404,000/ton

## Potential Impacts to Open Market with NOx RECLAIM Facilities

- ※ NOx ERC balance is low and declining
- ※ Annual average NOx ERC cost is \$69,000/ton<sup>1</sup>
- ※ Average annual RECLAIM demand: 0.65 tons/day
- ※ Additional offsets for major source modifications for revisions to NSR applicability and offset calculations not included
- ※ With RECLAIM, NOx ERCs in the open market could be depleted within 1 year
  - ※ Possible ERCs generated from shutdowns could delay depletion

### ※ Staff Recommendation

- ※ Based on the limited availability of offsets and increased demand from RECLAIM facilities, other options for offsets for NOx should be explored

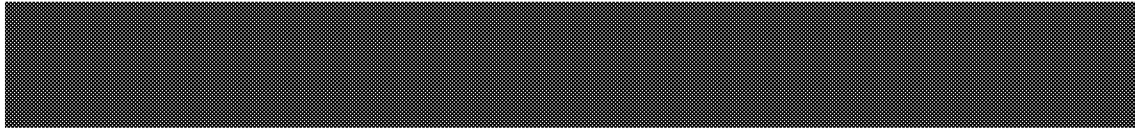


\*Unused ERCs were reissued because project was not implemented

<sup>1</sup> Based on average cost of ERCs between 2013 to 2017 (most recent 5 years of data). Note Avg cost 2011 to 2015 (same time for RECLAIM demand analysis) NOx: \$65,000/ton



INTERNAL BANK



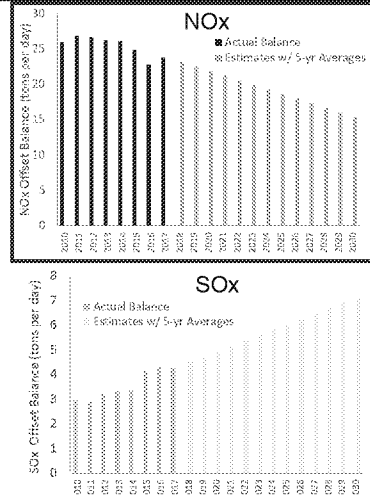
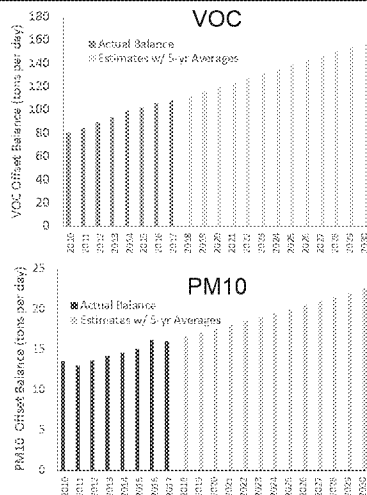
## South Coast AQMD Internal Bank

- ❖ Offsets in the Internal Bank generated mostly from orphan shutdowns
- ❖ All offsets in the Internal Bank are discounted annually to BARCT
  - ❖ Satisfy federal **surplus at time of use** requirement
- ❖ South Coast AQMD tracks, as debits, the offsets used for federal major sources
- ❖ Accounting of Internal Bank offsets is formalized in Rule 1315

Generation	Primarily orphan shutdowns (amount deposited = 80% of PTE of the orphan shutdown)
Discount	Entire balance discounted annually to BARCT
Issuance	Provided to sources that are eligible for Priority Reserve (Rule 1309.1) or exempt (Rule 1304)

# Projections for Internal Bank Offsets

- ❖ Projection based on average credits, debits, and BARCT discount over the 5 years with the most recent data available (2013 – 2017)
- ❖ Growth factor from 2016 AQMP applied to projected debits
- ❖ Projections only consider federal requirements
- ❖ VOC, PM10, and SOx internal offsets projected to increase
- ❖ Only NOx internal offsets projected to decline

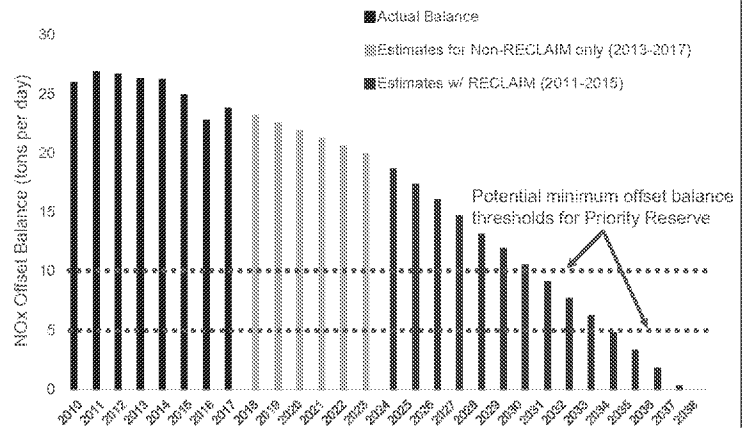


# Projection of NOx Internal Offsets Post-RECLAIM

- With RECLAIM demand of 0.65 tons per day, offsets potentially depleted by 2030s
- Sooner if offsetting calculation changed to Actual-to-PTE

Assumptions	Offset Balance (tons per day)
Credits (2013-2017)	1.18
Non-RECLAIM Debits <sup>1</sup> (2013 – 2017)	-0.19
BARCT Discount (2013 – 2017)	-1.63
RECLAIM Demand <sup>2,3</sup> (2011 – 2015)	-0.65

<sup>1</sup> Non-RECLAIM Growth Factor applied (based on 2016 AQMP): 1.01  
<sup>2</sup> RECLAIM Growth Factor applied (based on 2015 amendments): 1.02  
<sup>3</sup> Potential demand after applying the 1.2-to-1.0 ratio per Regulation XIII

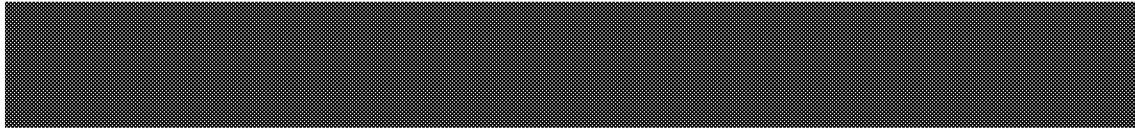


## Areas of Focus

- NOx offsets are a priority – Only nonattainment pollutant where offsets in the Internal Bank are projected to decrease
- Discuss RECLAIM with a BARCT overlay to continue utilizing RECLAIM NSR to minimize use of offsets under Regulation XIII
- Discuss use of the Internal Bank for sources > 4 tons per year
- Most substantial debits are associated with BARCT discount
  - Explore revisions to BARCT discount that more accurately reflect implementation of BARCT rules



BARCT DISCOUNT





## Rule 1315 Provisions for BARCT Discount

- BARCT discount is applied:
  - To entire Internal Bank offset balance and is pollutant specific
  - Annually and varies from year-to-year depending on the reductions associated with command-and-control rules for permitted sources
- Rule 1315(c)(4) – Surplus at the Time of Use
  - Credits from orphan shutdowns and reductions deposited in the Internal Bank are annually discounted to ensure that they remain surplus at the time of use<sup>1</sup>
  - Discount based on the percent reduction projected to be achieved as a result of implementation of command-and-control rules for permitted point sources that became effective during the previous calendar year for each specific nonattainment air contaminant within the District<sup>2</sup>

<sup>1</sup> BARCT discount also required for credits from the difference of an ERC with and without the BACT discount for cases approved by EPA

<sup>2</sup> Area source rules and emission reduction realized from BARCT rules impacting RECLAIM sources do not factor into BARCT discount

## Purpose of Using AQMP Inventory to Develop BARCT Discount Factor

- Since the BARCT Discount Factor is applied to the entire Internal Bank a composite percent reduction factor is needed
- Applying the percent reduction from the adopted/amended rule to the entire Internal Bank will overestimate the BARCT reductions
- The AQMP emissions inventory is used to develop a composite percent reduction to apply to the Internal Bank to better represent the overall BARCT percent reduction relative to the whole inventory
  - Provides a distribution of permitted sources
  - Can apply the percent reduction associated with adopted and amended rules with their implementation dates

## BARCT Methodology for BARCT Discount Factor

Apply Percent Reduction from Rule to AQMP Inventory

- For each equipment category affected by adopted/amended rule, apply percent reduction to equipment categories in AQMP inventory

Calculate Composite BARCT Discount Factor Based on AQMP Inventory

- Develop composite percent reduction of adopted/amended rules relative to AQMP permitted emissions inventory – Composite BARCT Discount Factor

Apply Composite BARCT Discount Factor to Internal Bank

- Apply Composite BARCT Discount Factor to previous year's Internal Bank balance

## Example of BARCT Methodology for BARCT Discount Factor

Apply Percent Reduction from Rule to AQMP Inventory

- Rule 1146 represents a 60% reduction for boilers and heaters beginning 2012
- This is reflected in AQMP inventory

Calculate Composite BARCT Discount Factor Based on AQMP Inventory

- Overall reductions in the AQMP inventory for permitted sources is 8%
- Composite BARCT Discount Factor is 8%

Apply Composite BARCT Discount Factor to Internal Bank

- Composite BARCT Discount Factor of 8% applied to previous year's balance in the Internal Bank

## Calculating BARCT Discount

- For years where there is no change in the AQMP baseline

$$\text{BARCT Discount Factor}_{\text{Year } n} = \frac{\text{Remaining Emissions}_{\text{Year } n}}{\text{Remaining Emissions}_{\text{Year } n-1}}$$

- If there is a change to the AQMP baseline, an adjustment is applied to normalize emissions to the 1990 baseline

## Example of Calculating BARCT Discount for 2013 (No Change in AQMP Baseline)

BARCT Year	Baseline Emissions (TPD)	Remaining Emissions (TPD)	Composite BARCT Discount Factor	Previous Year Internal Bank Balance (TPD)	BARCT Discount (TPD)
2010	9.38	7.60	0.871	26.82	3.73
2011	9.38	7.60	1	25.9	0
2012	9.31	7.50	0.969	26.8	0.84
2013	9.31	7.15	0.953	26.6	1.24
2014	9.31	6.85	0.958	26.21	1.10
2015	8.35	6.74	0.884	26.13	3.04
2016	8.35	5.99	0.889	24.82	2.73
2017	8.35	5.98	0.988	22.7	0.04

※ AQMP Baseline in 2012 and 2013 is 9.31 tpd (no change in AQMP Baseline)

※ Composite BARCT Discount Factor for 2013

$$= \frac{\text{Remaining Emissions}_{2013}}{\text{Remaining Emissions}_{2012}}$$

$$= \frac{7.15 \text{ tpd}}{7.50 \text{ tpd}}$$

$$= 0.953$$

※ BARCT Discount Factor is applied to the Previous Year Internal Bank Balance to provide the BARCT Discount

$$= 26.6 \text{ tpd} * (1 - 0.953) = 1.24 \text{ tpd}$$

## Calculating BARCT Discount When there is a Change in the AQMP Baseline

- An adjustment is applied to the Composite BARCT Discount Factor when there is a change in the AQMP Baseline
- Purpose of this adjustment is to normalize emissions to 1990, recognizing that a change in the baseline could affect the percent reduction
- Further analysis is needed to
  - Better understand the methodology regarding how the adjustment factor is developed
  - How to correct the adjustment factor to ensure that changes in the AQMP baseline are not reflected in the Composite BARCT Discount Factor to more accurately apply the BARCT Discount to the Internal Bank

## Example of Calculating BARCT Discount for 2015 (Change in AQMP Baseline)

BARCT Year	Baseline Emissions (TPD)	Remaining Emissions (TPD)	Composite BARCT Discount Factor	Previous Year Internal Bank Balance (TPD)	BARCT Discount (TPD)
2010	9.38	7.60	0.871	25.82	3.73
2011	9.38	7.60	1.000	25.90	0.00
2012	9.31	7.50	0.969	26.80	0.84
2013	9.31	7.15	0.953	26.60	1.24
2014	9.31	6.85	0.958	26.21	1.10
2015	8.35	6.74	0.884	26.13	3.04
2016	8.35	5.99	0.899	24.82	2.73
2017	8.35	5.98	0.993	22.70	0.04

\* AQMP Baseline in changed from 9.31 tpd in 2014 to 8.35 tpd in 2015

\* Composite BARCT Discount Factor for 2015

$$= \frac{\text{Remaining Emissions}_{2015}}{\text{Remaining Emissions}_{2014}} * \text{Adjustment Factor}$$

$$= \frac{6.74 \text{ tpd}}{6.85 \text{ tpd}} * 0.898$$

$$= 0.884$$

\* BARCT Discount Factor is applied to the Previous Year Internal Bank Balance to provide the BARCT Discount

$$= 26.13 \text{ tpd} * (1-0.884) = 3.04 \text{ tpd}$$



## Refinements to Current BARCT Discount

Refine the methodology used for changes in the AQMP baseline

Methodology needed to address differences between AQMP and rules emissions currencies

Application of BARCT discount should be modified when there are no sources that contributed to offsets in the Internal Bank

## Example of Application of Percent Reduction When the AQMP Baseline is Changed

BARCT Year	Baseline Emissions (TPD)	Remaining Emissions (TPD)	Composite BARCT Discount Factor	Previous Year Internal Bank Balance (TPD)	BARCT Discount (TPD)
2010	9.38	7.80	0.871	25.82	3.73
2011	9.38	7.60	1.000	25.90	0.00
2012	9.31	7.50	0.969	26.80	0.84
2013	9.31	7.15	0.953	26.60	1.24
2014	9.31	6.85	0.958	26.21	1.10
2015	8.35	6.74	0.884	26.13	3.04
2016	8.35	5.99	0.899	24.82	2.73
2017	8.35	5.98	0.993	22.70	0.04

- ※ 2014 and 2015 have the similar rules and emission reductions
- ※ 2014 percent reduction is  $(1-0.958) = 0.042$  or 4.2%
- ※ 2015 percent reduction  $(1-0.884) = 0.116$  or 11.6%
- ※ Methodology for the change in the baseline inventory between 2014 and 2015 inflated the BARCT discount
- ※ Based on implementation of rules with compliance dates in 2014 and 2015, the emission reductions in 2015 were over estimated and should be similar to 2014.

## Initial Recommendations for When the AQMP Baseline Inventory is Updated

- Refine the methodology used for changes in the AQMP baseline to more accurately reflect BARCT reductions that are applied to the Internal Bank
- Explore with U.S. EPA adding offsets back to the Internal Bank that are associated with the change in the AQMP baseline between 2014 and 2015

## Methodology to Address Differences in Baseline Emissions for Rules and the AQMP

- **Baseline inventories for rules are developed through a bottom up approach**
  - Based on individual facility emissions data for the specific equipment
  - Rule baseline uses specific facility data (Annual Emissions Reporting, surveys, permit limits, source test data, etc.) – generally uses most recent year for baseline emissions
  - Rule baseline captures the specific applicability equipment sizes, fuel types, industry categories, exemptions, etc.
- **Baseline inventories for the AQMP is developed through a top down approach**
  - Based on aggregated facility emissions that are distributed into equipment categories by industry types
  - AQMP based on Annual Emissions Reporting data and uses a specific base year
  - Equipment categories are generally much broader than the rule applicability
- **The estimated rule reduction from the rule development is applied to the baseline for the AQMP which produces different percent reduction than the adopted rule**

## Example of Difference in Baseline Inventories

- Current methodology assumes 2 tpd reductions for the AQMP and Rule
- Lower AQMP Baseline results in a higher percent reduction than rule
- AQMP percent reduction is applied to Internal Bank which overestimates the composite BARCT discount factor

AQMP Baseline (tpd)	AQMP Reduction (tpd)	AQMP Percent Reduction	Rule Baseline (tpd)	Rule Reduction (tpd)	Rule Percent Reduction
2.5	2	80%	2.7	2	74%

Lower baseline results in higher AQMP percent reduction than rule percent reduction

## Initial Recommendation to Address Difference in AQMP and Rule Baseline Inventories

- Adjust the AQMP Baseline inventory to reflect that a portion of the inventory is affected by reductions
  - Ensures that percent reduction for rule is more accurately represented in the composite BARCT discount factor

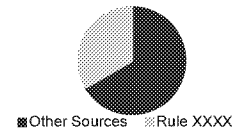
AQMP Baseline (tpd)	AQMP Reduction (tpd)	AQMP Percent Reduction	Rule Baseline (tpd)	Rule Reduction (tpd)	Rule Percent Reduction
2.7	2	74%	2.7	2	74%

AQMP baseline adjusted to reflect rule baseline  
AQMP and Rule have the same percent reduction

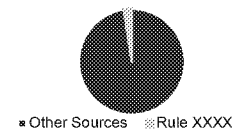
## Application of BARCT Discount

- Currently the composite BARCT discount is applied to the entire Internal Bank
- Some rules may regulate equipment where there are few or no orphan shutdowns associated with the regulated equipment
  - For example the AQMP baseline inventory for a specific equipment category may be significantly higher than the emissions for that same equipment category in the Internal Bank
- Initial Recommendation: If Internal Bank includes less than 10 percent of a source category, the composite BARCT discount factor should be adjusted accordingly

AQMP Inventory



Internal Bank

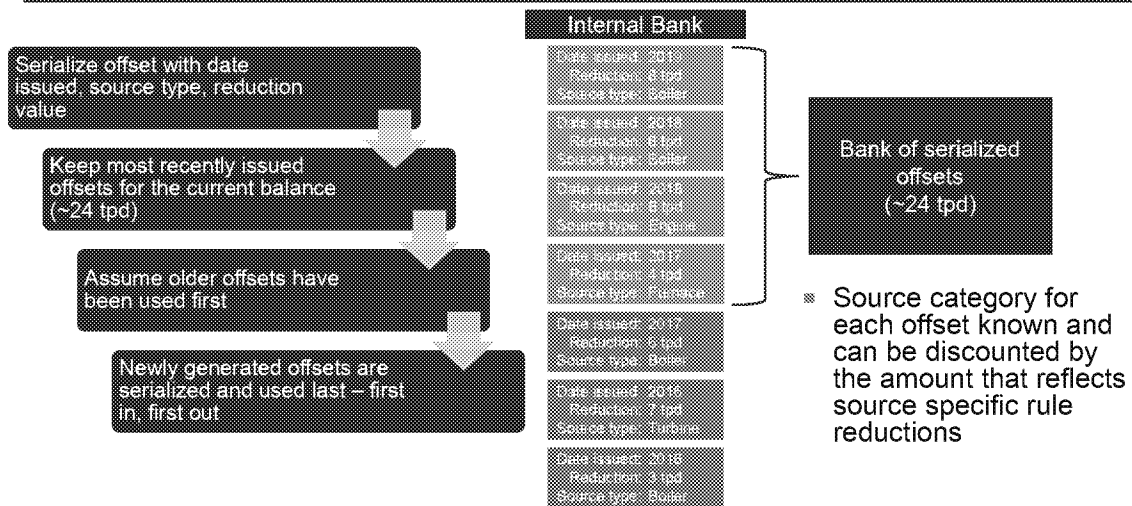


## Initial Concept for Serialized BARCT Discount

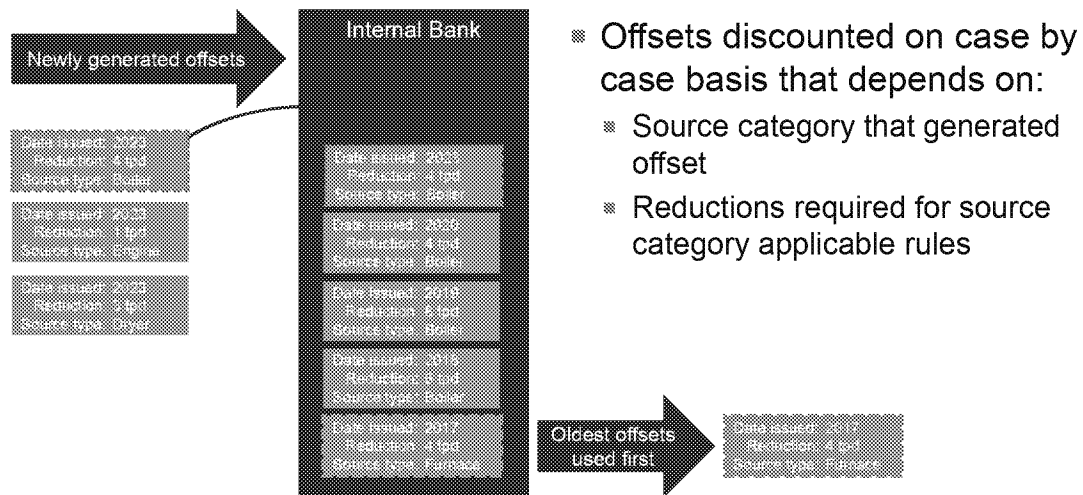
- Considering serialized approach for BARCT discount
- More traditional approach to discounting to ensure surplus at time of use
- Key elements
  - For NO<sub>x</sub>, SO<sub>x</sub>, and PM apply BARCT discount to individual offsets instead of entire bank (retain annual overall discount for VOC Internal Bank)
  - Discount applied when offset is deposited and adjusted at time of use if needed
  - Requires serializing and tracking all offsets
  - Existing Internal Bank offsets would consist of the most recently deposited offsets (additional information on next slide)
  - Use would be based on first in, first out approach



# Establishing Which Offsets Make Up the Bank Balance



## What is Methodology that Would be Used to Apply a BARCT Discount to Individual Offsets?



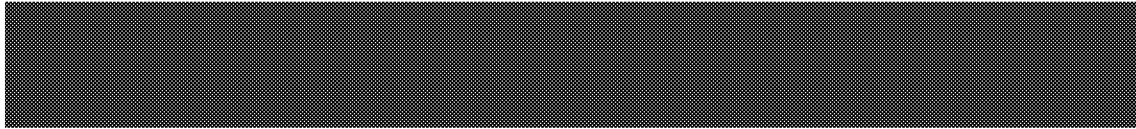
## What is Methodology that Would be Used to Offset at Time of Use?

Internal Bank		
Date issued: 2023 Reduction: 1 bpd Source type: Credit	Post 2023	
Date issued: 2023 Reduction: 4 bpd Source type: Debit		
Date issued: 2024 Reduction: 5 bpd Source type: Debit		
Date issued: 2025 Reduction: 4 bpd Source type: Debit	2022 and Prior	
Date issued: 2017 Reduction: 2 bpd Source type: Debit		
Date issued: 2018 Reduction: 3 bpd Source type: Debit		

- Discontinue annual BARCT discounting method on certain date (e.g. 2022)
- Surplus at time of credit
  - 2022 and Prior: Offsets are up-to-date based on the prior annual BARCT discounting
  - Post 2023: Offsets would be discounted at the time of evaluation when credit is generated
- Surplus at time debit
  - All internal offsets would be discounted when debited (time of use) to account for any reductions required by rules amended or adopted applicable to the source category for the offset

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USE OF INTERNAL BANK OFFSETS FOR  
SOURCES > 4 TONS PER YEAR



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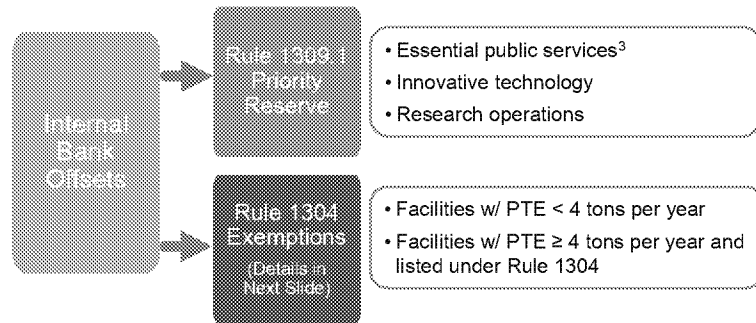
## Use of Internal Bank for Sources > 4 tons per year

- South Coast AQMD is exploring expanding the use of the Internal Bank offsets to all sources
- Use of offsets in the Internal Bank are most needed for NOx, but also needed for PM10 and SOx
- Internal Bank has more offsets available than the open market
- Discussion today is focusing on expanding the use of offsets in the internal bank
- Future discussions needed
  - ✧ General structure and approach
  - ✧ Set aside for essential public services
  - ✧ Use fee
  - ✧ Other provisions

## Background – Current Internal Bank

■ Internal Bank offsets are used for eligible sources:

- Priority Reserve (Rule 1309.1)<sup>1</sup>
- Exempt from offsetting (Rule 1304)<sup>2</sup>



<sup>1</sup>RECLAIM facilities currently not eligible for Priority Reserve

<sup>2</sup>BACT is still required for exempted sources

<sup>3</sup>All sources at these facilities must operate at or below BARCT

## Rule 1304 Exemptions

- Facilities are exempt from providing offsets under the following permitting projects – these offsets are covered under the Internal Bank

Replacements (functionally identical)	Abrasive blasting equipment	Emergency equipment	Air pollution control strategies	Portable equipment
Portable internal combustion equipment	Intra-facility portable equipment	Resource recovery and energy conservation projects	Regulatory compliance inc. increase in maximum rating)	Regulatory compliance for essential public services (offsets not available in the Priority Reserve)

Facilities with NO<sub>x</sub> PTE less than 4 tons per year

## Rule 1315 – Federal New Source Review Tracking System

- Rule 1315 memorializes in rule form:
  - A tracking system to demonstrate in the aggregate that enough offsets are provided as would have been required by the Federal Clean Air Act (CAA)
  - Includes methodologies for reviewing and quantifying emission reductions to ensure offsets meet the Federal integrity criteria for offsets
- Internal Bank is credited and debited pursuant to Rule 1315
- U.S. EPA SIP approved Rule 1315



## Reasons Why Offsets in the Internal Bank Should be Allowed to be Used for Sources > 4 Tons per Year

Offsets Meet Federal Integrity Criteria

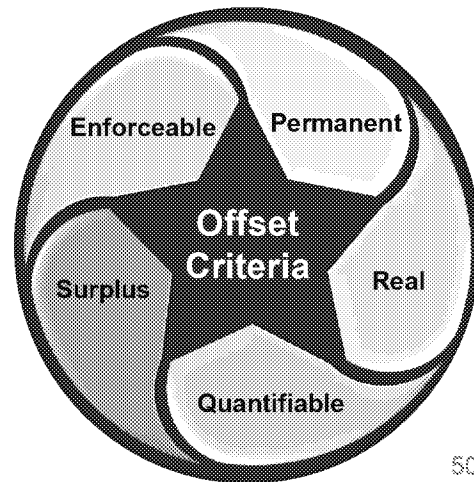
Tracking and Documentation for Internal Bank Consistent with Rule 1315

Provided Offsets Meet Federal Integrity Criteria, Use Should Not be Limited

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## Offsets in the Internal Bank Meet the Federal Offset Criteria

- Rule 1315 is SIP approved
- Rule 1315 ensures that the emission reductions in the Internal Bank meet the Federal integrity criteria
  - Specific provisions in paragraph (c)(6) (next slide)
- Same Federal integrity criteria for offsets in the Open Market – ERCs in the Open Market use a different approach to meet the Federal integrity criteria



## Rule 1315 (c)(6) – Federal Offset Criteria

	Federal Criteria	Rule 1315 Reference
Real	Actual emissions	Rule 1315(c)(3)(A) and (c)(3)(B)
Quantifiable	Emission reductions must be verifiable	Rule 1315(c)(1), (c)(3), (c)(4), and (c)(5)
Permanent	Permanent through permit conditions or permit closures and retired once used	Rule 1315 <sup>1</sup> (b)(4), (b)(5), and (c)(3)(A)
Enforceable	Legally and practically enforceable through permit conditions or permit closures	Rule 1315(b)(4), (b)(5), and (c)(3)
Surplus	Reductions beyond those required by the Federal CAA for SIP planning or other applicable rules and regulations	Rule 1315(b)(4), (b)(5), and (c)(4)

<sup>1</sup> To ensure permanent offsets, South Coast AQMD also debits the Internal Bank pursuant to subparagraph (c)(5)(B)

## Tracking and Documentation for Internal Bank Consistent with Rule 1315

- Debits (major sources) and credits (minor and major sources) follow Rule 1315
- South Coast AQMD debited offsets in the Internal Bank to ensure offsets met the following criteria:
  - 1990 starting balance only contains credits with sufficient documentation
  - Pre-1990 credits with insufficient documentation were eliminated
  - All verified pre-1990 credits for CO and PM10 were used by 1997 and retired at the end of 2005 for VOC, NOx, and SOx
- South Coast AQMD has a verification process and documentation for credits and debits for the Internal Bank

## South Coast AQMD's Validation Process

Credits

### Source of Credits

- Orphan shutdowns
- Orphan reductions
- ERCs provided as offsets by minor sources
- Excess ERCs provided at a 1.2-to-1.0 ratio for major sources of pollutants that are not in extreme nonattainment
- Payback of NSR offset debt through ERC banking
- Difference of ERC with and without BACT discount only for cases approved by EPA

### Offset Use

- Offsets provided to federal major sources for eligible projects pursuant to:
  - Rule 1309.1 (Priority Reserve); and
  - Rule 1304 (Offsetting exemptions)

### BARCT Discount

- Annual discount is to ensure offsets meet federal criteria and are surplus at the time of use

Debits

## South Coast AQMD's Validation Process

- Database query to identify permit status change and issuance during the validation period:
  - Equipment shutdown – permit inactivation
  - Permit cancelled due to nonpayment of renewal fee during the validation period – permit inactivation
  - Equipment modification – new permit issuance with reductions in emissions

## South Coast AQMD's Validation Process

- Review of engineering files to validate:
  - Permit status
  - Criteria pollutant (NOx/SOx emissions from RECLAIM facilities are excluded)
  - Equipment PTE
  - Equipment source category
  - Facility PTE to determine major and minor sources
- Creditable emission reductions that meet the above criteria are deposited into federal offset accounts at 80% of PTE  
[1315(c)(3)(B)(i)]

## Provided Offsets Meet Federal Integrity Criteria, Use Should Not be Limited

- Offsets in the Internal Bank are currently provided for sources with a PTE > 4 tons per year for:
  - Rule 1304 exempt sources (12 equipment/project categories)
  - Rule 1309.1 essential public services
- Federal Clean Air Act makes no distinction on the types of sources that use certain offsets, provided the offset meets the Federal integrity criteria
- Since offsets meet the Federal integrity criteria, sources with PTE > 4 tons per year should be allowed to use offsets in the Internal Bank
- Staff Recommendation: Allow use of offsets in the Internal Bank for all sources